



ATTORNEY DOCKET 678-1182 (P11010)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): WANG, Keum-Chan et al.

Examiner:

Serial No.: 10/630,215

Group Art Unit:

Filed: July 30, 2003

Date: October 1, 2003

For: **APPARATUS AND METHOD FOR GENERATING SPACE-TIME TRELLIS CODE FOR MAXIMIZING SPACE-TIME DIVERSITY GAIN AND CODING IN A MOBILE COMMUNICATION SYSTEM**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to Applicant(s) duty of disclosure, the information listed on the attached form PTO-1449 is brought to the attention of the Examiner. A copy of the listed items is enclosed.

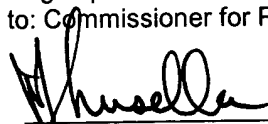
The citation of the listed items is not a representation that they constitute a complete or exhaustive listing of the relevant art or that the references are prior art. The items listed are submitted in good faith, but are not intended to a substitute for the Examiner's search. It is hoped, however, that in addition to apprising the Examiner of these particular items, they will assist in identifying fields of search and in making as full and complete a search as possible.

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CERTIFICATION UNDER 37 C.F.R. § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: October 1, 2003

  
\_\_\_\_\_  
Michael J. Musella

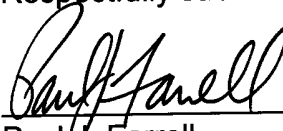
The filing of this information disclosure statement is not an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

- ☒ This information disclosure statement is being filed within three (3) months of the filing date of this application.
- ☐ This information disclosure statement is being filed within three (3) months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application.
- ☐ To the best of Applicant(s) knowledge, this information disclosure statement is being filed before the date of mailing of a first Office Action on the merits in connection with this case.
- ☐ Enclosed herewith is a certificate under 37 C.F.R. § 1.97(e)(1).
- ☐ Enclosed herewith is a petition under 37 C.F.R. § 1.97(d)(ii).
- ☐ Enclosed by check is the petition fee of \$130.00. 37 C.F.R. § 1.17(i)(1))
- ☐ Please charge the **\$130.00** petition fee to Deposit Account No. **04-1121**.
- ☐ Enclosed by check is the **\$180.00** fee required by 37 C.F.R. § 1.17(p).
- ☐ Please charge the **\$180.00** fee required by 37 C.F.R. § 1.17(p) to Deposit Account No. **04-1121**.

**[X]** Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account **04-1121**. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. **04-1121** therefor. **TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.**

Early and favorable consideration of the case is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Paul J. Farrell", is written over a horizontal line.

Paul J. Farrell  
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U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

SERIAL NO.  
10/630,215

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

APPLICANTS  
WANG, Keum-Chan et al.

FILING DATE  
July 30, 2003

GROUP ART UNIT

(Use several sheets if necessary)

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

		Vahid Tarokh, Nambi Seshadri, A.R. Claderbank; "Space-Time Codes for High Data Rate Wireless Communication: Performance Criterion and Code Construction"; 3/1998; IEEE Transactions on Information Theory, Vol. 44, No. 2; pgs. 744-765
		Abbas Yougacoglu, Mohamed Siala; "Space-Time Codes for Fading Channels"; IEEE 1999; pgs. 2495-2499
		Welly Firmanto, Branka S. Vucetic, Jinhong Yuan; "Space-Time TCM with Improved Performance on Fast Fading Channels"; 4/2001; IEEE Communications Letters, Vol. 5, No. 4; pgs. 154-156

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.  
Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.